

AMENDMENTS TO THE CLAIMS:

Claims 50-62 are added. The following is the status of the claims of the above-captioned application, as amended.

Claims 1-30 (Cancelled.)

Claim 31. (Previously presented.) A variant of a parent Fungamyl-like alpha-amylase, comprising an alteration at one or more regions selected from the group consisting of:

Region 98-110,

Region 150-160,

Region 161-167,

Region 280-288,

Region 448-455, and

Region 468-475;

wherein (a) the alteration(s) are independently

(i) an insertion of an amino acid downstream of the amino acid which occupies the position,

(ii) a deletion of the amino acid which occupies the position, or

(iii) a substitution of the amino acid which occupies the position with a different amino acid,

(b) the variant has alpha-amylase activity and (c) each region or position corresponds to a region position of the amino acid sequence of the parent Fungamyl-like alpha-amylase having the amino acid sequence of SEQ ID NO: 2.

Claim 32. (Previously presented.) The variant of claim 31, wherein the variant includes the following substitution: Q153S.

Claim 33. (Previously presented.) The variant of claim 31, wherein the variant has improved thermostability and/or increased stability at acidic pH.

Claims 34-38 (Cancelled)

Claim 39. (Previously presented.) A composition for producing high maltose syrup comprising the variant of claim 31.

Claim 40. (Previously presented.) A dough improving composition, comprising the variant of claim 31.

Claim 41. (Previously presented.) A brewing composition, comprising the variant of claim 31.

Claim 42. (Previously presented.) The brewing composition of claim 41, further comprising at least one enzyme selected from the group consisting of beta-amylase and isoamylase enzymes.

Claim 43. (Previously presented.) A composition for producing alcohol, comprising the variant of claim 31.

Claims 44-47 (Cancelled)

Claim 48. (Previously presented.) The variant of claim 31 wherein said variant is immobilized.

Claim 49. (Cancelled.)

Claim 50. (New.) The variant of claim 31, wherein the alteration is an alteration in Region 98-110.

Claim 51. (New.) The variant of claim 31, wherein the alteration is an alteration in Region 150-160.

Claim 52. (New.) The variant of claim 31, wherein the alteration is an alteration in Region 161-167.

Claim 53. (New.) The variant of claim 31, wherein the alteration is an alteration in Region 280-288.

Claim 54. (New.) The variant of claim 31, wherein the alteration is an alteration in Region 448-455.

Claim 55. (New.) The variant of claim 31, wherein the alteration is an alteration in Region 468-475.

Claim 56. (New.) The variant of claim 31, wherein the parent Fungamyl-like alpha-amylase has at least 70% identity to SEQ ID NO:2.

Claim 57. (New.) The variant of claim 31, wherein the parent Fungamyl-like alpha-amylase has at

least 80% identity to SEQ ID NO:2.

Claim 58. (New.) The variant of claim 31, wherein the parent Fungamyl-like alpha-amylase has at least 90% identity to SEQ ID NO:2.

Claim 59. (New.) The variant of claim 31, wherein the parent Fungamyl-like alpha-amylase has at least 93% identity to SEQ ID NO:2.

Claim 60. (New.) The variant of claim 31, wherein the parent Fungamyl-like alpha-amylase has at least 95% identity to SEQ ID NO:2.

Claim 61. (New.) The variant of claim 31, wherein the parent Fungamyl-like alpha-amylase has at least 97% identity to SEQ ID NO:2.

Claim 62. (New.) The variant of claim 31, wherein the parent Fungamyl-like alpha-amylase has at least 99% identity to SEQ ID NO:2.